

ABSTRACT OF THE DISCLOSURE

A soft magnetic underlayer includes a first amorphous soft magnetic layer to which an exchange bias magnetic field
5 is applied directly from an antiferromagnetic layer or via a ferromagnetic layer, and a second amorphous soft magnetic layer which is formed on the first amorphous soft magnetic layer via a non-magnetic layer. The first amorphous soft magnetic layer and the second amorphous soft magnetic layer
10 are antiferromagnetically coupled.